

To: Richman, Lance[Richman.Lance@epa.gov]
Cc: Kim and Bill Reich[kreich1803@charter.net]
From: Reich
Sent: Fri 8/14/2015 9:27:47 PM
Subject: Bill Reich JDI Bio Logic - Some Thoughts for an Independent 3rd Party Stream and River Bed Baseline Sampling - Gold King Mine Spill

Lance,

I have been coordinating with a good friend at a smaller (approximately 1,200 employees +/-) environmental management/engineering firm that I have worked with. I know you all are considering and implementing various programs for the Gold King Mine spill. Have you considered setting up an initial baseline sampling program to sample the stream and river beds downgradient of the spill site? Starting with Cement Creek (although we know this stream will be "hot") and moving downstream into the Animas, the San Juan etc. This would be an independent, non-biased third party sampling program managed by a known environmental/engineering consulting firm, that has GSA contracts. Obviously there would be coordination with EPA and the cooperating agencies, but it would provide full, open disclosure of the spill impacts.

Initially, the sampling points can be set at specific intervals; starting in the vicinity of the mine site and moving down stream, with samples being collected at a set interval (10 miles; 15 miles etc.). At the moment, the sheer length of the stream and river beds impacted is substantial. Setting out initial sampling points at 10 or 15 mile intervals would provide a solid, initial review of the impacts, along with a basic understanding of where the highest level of contamination occurred. I suspect, as do most, that the further one moves downstream, the sampling will show the impact to the San Juan River bed, and potentially Lake Powell, will be substantially less than what occurred further upstream in the Animas River etc.

An initial baseline program such as this will also allow EPA to focus in on "any hot spots", where more detailed sampling could be initiated.

Obviously the baseline sampling would test for the presence/levels of heavy metals in the stream/river bed and banks as appropriate. We could also sample for impacts to macro and micro-invertebrates and other aquatic life; water quality; and possibly stream/river bank vegetation (bio-sampling). The sampling protocols and procedures can be easily worked out.

The baseline sampling results can be compared to any existing water quality sampling for the streams and rivers to illustrate where impacts are severe; where they are potentially less severe; and possibly indicate areas of no impact.

The results of this type of baseline program could easily alleviate some fears regarding contamination in the surface waters, groundwater, water wells, aquatic life, fisheries etc. And, it would be full disclosure as it would be an independent, 3rd party study. Obviously coordinated with EPA, along with other state, local and federal agencies that are involved.

As always, give a call or email with questions etc. We can get geared up for this program quickly.

Best Regards,

Bill

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